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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
WANG, SHENGJUN	

ART UNIT	PAPER NUMBER
1627	

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01/21/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/759,165	DOUIN ET AL.	
	Examiner	Art Unit	
	Shengjun Wang	1627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 October 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,25,28,38,39 and 43-58* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,25,28,38,39 and 43-58* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Receipt of applicants' amendments and remarks submitted October 9, 2009 is acknowledged.

Claim Rejections - 35 U.S.C. 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 25, 28, 38, 39, and 43-58 rejected under 35 U.S.C. 103(a) as being unpatentable over Sweger et al. (US patent 5,482,704, or record), in view of Matsumoto et al. (U.S. Patent 6,010,689) and Uchiyama et al. (US Patent 5,876,705).

Sweger teaches a hair compositions containing amino-multicarboxylate modified starch. See the claims. Example 1 illustrates a starch modified with 2-chloroethylaminodipropionic acid (CEPA) (see col. 6, line 44 through col. 7, line 10). The starch derivatives provide thickening and emulsion stabilization and exhibit good appearance and feel to the skin (see col. 1, lines 32-37, col. 9, lines 60-63). The reference teaches that polyacrylic acid polymers such as Carbopol resins are the leading thickeners and emulsion stabilizers in the skin care and hair care markets. The reference further teaches that CEPA-modified starch gives stable viscosity over time and is superior to the Carbopol@ standard (see col. 9, lines 1-6).

Sweger does not teach expressly the other ingredients in the hair composition, such as conditioning agent behenyltrimethylammonium, or anionic surfactant alkyl ether sulfate.

However, it would have been prima facie obvious to a person of ordinary skill in the art, at the time the claimed the invention was made, to use hair conditioning agents, and surfactants because those are well known essential ingredients normally used for hair compositions. For example, Matsumoto et al. teaches that behenyltrimethylammonium is a well-known hair conditioning agent, and alkyl ether sulfate are anionic surfactant known to be useful in hair composition. See, particularly, column 2, line 13 to column 3, line 36, column 5, lines 28-50, and column 7, lines 13-65. Uchiyama et al. teaches that a conditioning shampoo composition may comprise anionic surfactant, conditioning agent, such as behenyltrimethylammonium and thickener. See, particularly, the claims, and column 22, lines 34-55. Further, The optimization of a result effective parameter, e.g., optimal amounts of each known ingredients in a cosmetic composition, or a proper pH, is considered within the skill of the artisan. See, In re Boesch and Slaney (CCPA) 204 USPQ 215.

2. Claims 1, 25, 28, 38, 39, and 43-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Janchipraponvej (US Pat. 4,954,335) in view of Sweger et al (US Pat. 5,482,704) and Martino et al (US Pat. 6,210,689) and in further view of Uchiyama et al.

Janchipraponvej teaches clear conditioning compositions and methods to impart improved properties to hair. The compositions provide excellent wet comb and dry comb properties to the hair, and the hair demonstrates improved physical and cosmetic properties (see col. 7, lines 21-48). The compositions of Janchipraponvej contain quaternary ammonium compounds (see col. 8, line 8-47). Behenyltrimethylammonium chloride is specifically taught (see col. 10, lines 1-29). Weight percentages of the quaternary ammonium compound are taught (see col. 10, lines 30-45). The reference teaches the use of thickening agents such as polyacrylic

acid derivatives, and that the resulting compositions are relatively viscous compositions that are stable to phase separation for an indefinite period of time (see col. 16, lines 9-32). A preferred range of pH from 5.5 to 6.5 is taught (see col. 14, lines 5-18). Additional surfactants are included in the composition (see col. 14, line 19 through col. 15, line 18). The reference lacks modified starch and anionic surfactants.

Sweger teaches cosmetic compositions containing amino-multicarboxylate modified starch. Example 1 illustrates a starch modified with z-chloroethylaminodipropionic acid (CEPA) (see col. 6, line 44 through col. 7, line 10). The starch derivatives provide thickening and emulsion stabilization and exhibit good appearance and feel to the skin (see col. 1, lines 32-37., col. 9, lines 60-63). The reference teaches that polyacrylic acid polymers such as Carbopol resins are the leading thickeners and emulsion stabilizers in the skin care and hair care markets. The reference further teaches that CEPA-modified starch gives stable viscosity over time and is superior to the Carbopol@ standard (see col. 9, lines 1-6). Sweger et al. further teaches that the CEPA-modified starch may be used together with other ionic or non-ionic surfactants. See, particularly, col. 4, line 39 to col. 5, line 13.

Martino teaches the use of alkyl ether sulfate salts as well know surfactants in cosmetic formulations (see col. 5, lines 1 1-26). The reference teaches that certain alkyl ether sulfate salts are particularly useful in combination with keratin treating cosmetic compositions containing amphoteric starch derivatives as disclosed in the reference (see abstract and col. 5, lines 16-17). Uchiyama et al. teaches that a conditioning shampoo composition may comprise anionic surfactant, conditioning agent, such as behenyltrimethylammonium and thickener. See, particularly, the claims, and column 22, lines 34-55.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the compositions of Janchipraponvej by the addition of amphoteric starches as taught by Sweger and anionic surfactants as taught by Martino in order to benefit from the improved results of the amphoteric starches with respect to viscosity and thickening as taught by Sweger.

Response to the Arguments

Applicants' remarks submitted October 9, 2009 have been fully considered, but are not persuasive.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the teaching, suggestion and motivation are found in the cited prior art and in the knowledge generally available to one of ordinary skill in the art. Particularly, the employment of those old and well-known hair care ingredients in a hair care composition would have been obvious to one of ordinary skill in the art.

The evidence of record shows that the subject matter as claimed is a combination of known components selected for their known properties. A claim which unites elements with no change in their respective functions to yield a predictable result is not patentable in the absence of secondary considerations.

For over a half century, the [Supreme] Court has held that a "patent for a combination which only unites old elements with no change in their respective functions ...obviously withdraws what is already known into the field of its monopoly and diminishes the resources available to skillful men." Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152 [87 USPQ 303] (1950). This is a principal reason for declining to allow patents for what is obvious. The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.

KSR Int'l v. Teleflex Inc., 82 USPQ2d 1385, 1395 (2007).

As discussed in the prior office actions, the evidence on the record fails to establish a prima facie case of unexpected results which are statistically and practically significant and are commensurate in scope with the claimed invention.

Applicants also contend that Sweger only teach that amino-multicarboxylate starch derivative can “provide thickening and emulsion stabilization and exhibit good appearance and feel to the skin,” but does not teach or suggest that it would improve the properties of hair conditioner. The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Further, "In determining whether the subject matter of a patent claim is obvious, neither the particular motivation nor the avowed purpose of the patentee controls. What matters is the objective reach of the claim. If the claim extends to what is obvious, it is invalid under § 103." Int'l Co. v. Teleflexlnc., 127 S. Ct. 1727, 1741, 82 USPQ2d 1385, 1397 (2007)

Applicants repeatedly cite specific examples in the cited references, arguing that, based on those examples, one of ordinary skill in the art would have not been motivated to combine the elements as herein claimed. Note, question under 35 U.S.C. 103 is not merely what reference expressly teach, but what they would have suggested to one of ordinary skill in the art at the time

the invention was made; all disclosures of prior art, including unpreferred embodiments, must considered. In re Lamberti and Konort (CCPA), 192 USPQ 278.

With respect to the rejections over Janchipraponvej in view of Sweger, Uchiyama and Martino, applicant argue that there is no teaching, suggestion in cited references to particularly chose CEPA. It is noted that Sweger reference particularly teaches CEPA provides thickening and emulsion stabilization and exhibit good appearance and feel to the skin (see col. 1, lines 32-37, col. 9, lines 60-63). Applicant's arguments for "unpredictability" are not persuasive. As discussed on the record, applicants fails to establish a prima facie case of unexpected benefits residing in the claimed invention, which are sufficient to overcome the obviousness set forth in the rejection.

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shengjun Wang whose telephone number is (571) 272-0632. The examiner can normally be reached on Monday to Friday from 7:00 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Shengjun Wang/
Primary Examiner, Art Unit 1627